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MUSSER FOUNDATION AWARDS 1992 DOCTORAL SCHOLARSHIPS to three promising future turfgrass researchers and leaders.

ANDSCAPE ILLUMINATION

Richard Davis, Jeffrey Klingenberg and Zachary Reicher each were awarded \$4,000 Musser Scholarships.

Mr. Richard Davis obtained his Masters Degree in Plant Pathology at Auburn University and is preparing his Doctoral thesis on ecological aspects of four turf nematode species attacking creeping Bentgrass at the University of Illinois. His principle advisers are Dr. Henry Wilkinson and Gregory Noel.



Mr. Zachary Reicher did his Masters work at Iowa State University on the effects of preemergence herbicides on rooting of Kentucky Bluegrass. Now at Purdue University, his Doctoral thesis is on the effect of repetitive applications of fungicides on Creeping Bentgrass. His principle adviser is Dr. Clark Throssell.

Mr. Jeffrey Klingenberg obtained his Masters degree from New Mexico State University. His Doctoral thesis at the University of Nebraska is on development of drought avoidance mechanisms in turf type seeded Buffalograss. His principle adviser is Dr. Terrance Riordan. Each year the Musser Foundation looks for the brightest and most promising turfgrass Doctoral students throughout the world to award moral and financial support. To qualify for a grant a student must be in their last year of their Doctoral program, hae an accumulative grade point average of 3.4 or above with their thesis on turfgrass research to the direct benefit to turfgrass science. They must also demonstrate leadership in academic and extracurricular activities.

Frank Dobie, President of the Foundation explained, "**Professor Burton Musser was a turfgrass pioneer** for four decades at Penn State University. The Foundation that bears his name is dedicated to promoting that same kind of pioneering individual. We must seek new paradigms of thinking if we expect to solve the complex problems of today's world. Supporting this new generation of turfgrass scientists is the wisest move we can make."

Over the past four years \$40,000 in scholarships have been awarded: Gwen Stahnke of the University of Nebraska, Andrew Ralowicz of the University of Arizona, Virginia Lehman of Texas A & M, Phil Allen from University of Minnesota, Melody Kemp of Rutgers University, and James Bond of the University of Tennessee.

What's New in Flowering Annuals

by Dean Bemis

With over 150 new varieties in flowering annuals introduced each year ... it's almost impossible for a busy golf course superintendent to keep up with their evaluations! Vaughan's Seed Company of Downers Grove has more than 7 acres of flowering annual comparisons located 6¹/₂ miles west of DeKalb, Illinois on the campus of Kishwaukee College. Here we can visit our comparisons weekly and track their performance throughout the spring, summer and fall.

If you would like to visit these field trials and receive a guided tour, I would be happy to organize small groups to visit our trials. If you would like to arrange a date and time, please call 1-800-323-7253 and ask for Dean in the Sales Department.

If your schedule won't allow a firsthand visit to our field comparisons, the following are some new varieties to think about for the upcoming bedding plant season. It's not too early to develop a plan for the use of annuals in the golfscape ... if you need help, please call me!

BEGONIA AMBASSADOR SERIES is a green leaf fibrous type begonia bred for larger flowers and earlier flowering. This outstanding performer is more vigorous than the traditional Coctail Series (bronze leafed) or Rio Series (green leafed). Available in Scarlet, Rose, Soft Pink, White, and a mix of colors. Should be used on 6'' spacing ... morning sun and afternoon shade are ideal. With enough sun, all the leaves will eventually turn bronze except on the Ambassador White which will stay a deep lush green color!

MARIGOLD MARVEL SERIES is an early blooming African (tall) type marigold with beautifully tightly packed rows of petals. A very symmetrical and uniform flower head establishes on a 12-14" plant. Loves full sun and is available in Yellow Chiffon, Gold, Orange, and normal Yellow colors. Should be used on 6" spacing.

PETUNIA PRIMETIME RED VEINED is a new addition to the multiflora petunia series "Primetime". This is an outstanding garden performer! Primetime Red Veined has a beautiful rich red color with deeper red veins. Should be used on 4" spacing and will tolerate more abuse than normal grandiflora petunias.



Petunia Primetime Red Veined

SALVIA SIZZLER SERIES is a tremendous garden performer with a wide range of flower colors available. Bred for its early flowering and uniform compact habit ... the deep green foliage contrasts beautifully with the flower spike color. Can be used in shade (if placed there already in bloom), partial shade (morning sun and afternoon shade), or full sun. Expect some flower fading during mid summer heat if used in full sun. Should be used on 6'' spacing.



Salvia Sizzler Red

VINCA BLUSH COOLER has a tremendous branching habit and the unique blush pink petal with a rose eye. The performance in the golfscape is exceptional! Loves all the full sun and heat that the midwest can dish out! Should be used on 4" spacing. Pay special attention to the overlapping petals.



Vinca Blush Cooler

This season has been a "lousy" season for the growth and flower production of annuals; 40° nights and cool days are not conducive for filling in flower beds! As July progresses and with the onset of warm, humid days and nights, watch your flowering annuals really go to town! If they haven't done much yet, don't get excited, they will come around! Build your Pythium control program on a firm foundation. Chipco[®] Aliette[®]





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Planning for Your Retirement

by F. Bill Billimoria

1. Non-Financial Issues:

Most people, when planning for retirement, think first about money. They are concerned, and correctly so, about pension plans, the inadequacies of Social Security, and the best taxdeferred investments. However, that is putting the cart before the horse. Planning for retirement should begin with deciding where you want the horse to go. Determine your retirement lifestyle goals first — preferably years in advance — then balance those goals with your checkbook by doing some realistic financial planning.

Begin by making a list of how you envison your retirement lifestyle. Each spouse should develop his or her own list, since you may have different dreams that may need to be reconciled. Some of the questions your list should address are:

• Where do you want to live? Somewhere warm? Big city or small town? Near your children or special friends or in a retirement community near a fish-filled stream?

• Take a good look at your current home. Would you feel more comfortable in a smaller home, a mobile home, an apartment? Do you want a place with a garden? Will you be able to handle the upkeep of your yard and the house? Is it convenient? Do you like the neighborhood, or is it time for a change?

Retirement is no longer a matter of settling into a rocking chair and dying two years later. You could be "retired" for twenty years or more. Think of it as a new phase of your life. List how you want to spend all that time. Travel? Where to? Maybe you want to spend time on your hobbies, return to the classroom, or do volunteer work. You may even want to start your own business (consulting, franchising, etc.) or work parttime for an employer.

Plan and pace the timing of these changes. Moving to Hawaii and starting up a small business the day after you have collected the gold watch is a tremendous adjustment, both for you and your financial resources. You may want to stay in your current home for several years, for example, before you move.

Once you have listed and prioritized your ideal retirement lifestyle, and the pace at which you will step into that lifestyle, begin to work with your advisor to determine where, realistically, the money will come from to achieve your dreams. Financial reality may dictate modifications of your goals, but by knowing where you want to go and how you are going to get there, you will have increased significantly the chances of achieving your retirement dreams.

2. Financial Issues:

Once you have examined the non-financial issues of retirement — where you want to live, what you want to do — it is time to determine how much money you will need to save now to achieve your retirement lifestyle later. While it is best to evaluate your retirement strategies with the help of an advisor, the following offers some useful guidelines whether you use an advisor or not:

Start with anticipated expenses. A general rule is that you will need 70 to 75 percent of your preretirement income to live on during retirement. The percentage would obviously decline the higher your preretirement income. The rule works fairly

well if you anticipate your retirement lifestyle to basically reflect your preretirement lifestyle: same home, some routine expenses, such as food, taxes, hobbies, etc.

A more in-depth approach is required, however, if you anticipate unusual expenses such as medical expense, taking care of an aging parent or an adult child, providing gifts to your grandchildren, retiring in a different state or a foreign country, or taking big-ticket vacations. You may also want to break down these expenses into those anticipated during early retirement (paying off your mortgage, for example) and later retirement.

How many years will you need to incur these expenses that is, how long do you plan to live? Some experts recommend that you determine your post-retirement life expectancy, and double it! You will also need to take inflation into consideration, no easy job in itself.

Next, where will the money come from for your retirement lifestyle? Determine the Social Security benefits you will be entitled to, distributions from your company pension and profitsharing plans, your own pension programs such as Individual Retirement Accounts (IRA's) and annuities, and income from your investments. Will you work part-time after you retire? Do you plan to sell your home? Take into account that too much income could affect Social Security benefits (up to age 70) and taxes.

Once you know what you need and what you have, determine how much money you will need to save each year until retirement to cover the gap, unless you are one of those who do not have a gap. If the gap is too great, you may need to cut back on your retirement ambitions (no trips around the world), increase current income, or increase current savings.

The time to get started on your retirement plan is NOW. In addition to taxes and inflation, the single most common reason why people fail to achieve financial independence at retirement is PROCRASTINATION. Surveys have shown that the biggest worry for most Americans is a secure retirement, yet most people spend more time planning their two week vacation than they do planning their entire retirement. Small wonder that of one hunded people reaching age 65, only four are truly independent, 23 have to keep working and 73 are dependent upon the government, friends and relatives!

About the author — F. Bill Billimoria, MBA, CPA, CFP is President of Integrated Finances, Inc., a fee-based financial planning and investment management firm located in Arlington Heights.

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UNIVERSITY PARK, PA — Applications are now being accepted for Penn State's Two-Year Technical Turfgrass Management Program for the class beginning in October of 1993. There is an application fee of \$35.00 and the deadline for applications is December 31, 1992. Applications can be obtained by calling (814) 865-8301 or by writing to: Short Course Office, The Pennsylvania State University. 306 Ag. Administration Building. University Park, PA 16802.



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England, Scotland, Wales and the Dales, and Oh Yes, St. Andrew Too

by Fred D. Opperman

I just returned from a family vacation in England. It was an anniversary present to ourselves and it happened that our son was traveling in Europe at the time and he was able to join us for the two weeks.

We rented a car and basically looped England and never did get into London. We wanted to see the countryside and meet the people. Our goal was accomplished for we drove over 2100 miles on the "wrong side of the road" and stayed in 10 different B&B (that is Bed & Breakfast, not balled and burlapped!) that ranged from farm houses to country estates that were built and lived in since the mid 1700 up through 1920's. Our hosts were always extremely friendly and delightfully charming English.



Fred & Todd loading the car after a night at the Heaves mansion.



A thatched roof house in Chipping Camden.

The countryside of England has varying terrains and geography. The thing that impressed me was the amount of labor that it took to clear the many fields where the sheep and cattle were grazing. Most of the paddocks, as they were referred to, were walls of neatly laid field stone. One would look down, or up onto the hillside and see field after field of a grid lock of interconnecting stone walls. It was beautiful and mind boggling to think of the hours upon hours and centuries of labor to lay all of that stone to clear the fields.



A typical farmers "paddock" or field in the country side, where the stone walls march on forever and intersect with each other.

The countryside is clean and neat. The English love to garden and it shows. Every house has their flower garden and flower baskets and pots are profusely abundant around their homes. The trees are huge on the estates, castles and cathedrals. One maple on the grounds of Windsor Castle must have been 6-7 feet in diameter, height of 80 feet plus and a width of 120 feet. Purple beeches were everywhere with diameters of 3-5 feet. Many hedgerows were made out of either green or purple leaf beech.



A huge maple tree on the grounds of Windsor Castle.

The larger trees were very impressive, but the smaller trees that were just planted were really in our system, just park grade quality. They didn't know what a B&B tree was, let alone a spade planted tree. The largest tree I saw available for the home owner would be a $1\frac{1}{2}$ " caliper in a $2\frac{1}{2}$ gallon container. From all I could find out, there were only a few tree nurseries that had field grown trees and then they were placed in these pots.

On the grounds of Windsor Castle they had a beautiful mature row of Horsechestnuts lining the walk, yet where they lost a tree, it was replaced by a 1½ inch tree!



I just love a Larch tree!



Fred Opperman & son Todd in front of a large green beech in a grove of many.

I was able to spend a morning at St. Andrews with Walter Woods, B.E.M., (an honorary title bestowed on him last year by the Queen. I must admit I forgot to inquire what the letters stand for.) Walter drove my all around the 700 acre complex in his jeep for it was lightly raining at the time. Speaking of rain, St. Andrews gets only 20-22 inches of rain per year! That is 10 inches less then we receive here in the Chicago area. He has a tough time establishing grass due to the lack of rain and an almost constand wind that dries out the soil. He is just completing an additional 27 holes to help alleviate the heavy demand of golf. On tope of that a new clubhouse will be built for the public golf and new driving range and tees. He carries a crew of about 30 men during the winter months and goes up to 60-70 during the tournaments and summer months. The courses are completely irrigated with a new system and pumping station in the last few years. Like most golf course superintendents his maintenance facility is in a couple of buildings and inadequate for the amount of equipment he has. There is some hope he states in getting a new building to replace the ones he now operates out of.

I was in awe to be able to get into the clubhouse and have a tour of this very exclusive cathedral of golf. The trophy room with the history, of all the trophies, pictures and golf clubs was something else. The members locker room resembled more of a library and sitting room than the locker rooms of our clubs here in the states. The library itself had a collection of books dating back to the beginning of golf and all that had been written on the game since.



Judy & Todd sitting in front of "The Buck Inn" having an afternoon "tea". After taking the picture, I had a pint of bitters and let Todd drive ...



The landscape of St. Andrews Golf Club.



This is a double green, with a foursome and caddies on the "other green".



Pubs & shops on a street leading up to Windsor Castle.

One can't talk about England, without mentioning their pubs. The pub in England is the social place of every community. The names of the pubs weren't "Joe's Place" or "Harry's Lounge", but "The White Horse", "King's Crown", "Shield & Sword", "Bull's Roar" or the "Crossed Arms". Really great names of various items, animals or places. Plus they had great beer! I'll really miss walking up to the bar and saying, "A pint of bitter, please".





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Upcoming Events—Mark Your Calendar

August 5 — ILCA Field Day at Chicago Botanic Garden

August 10 - MAGCS monthly meeting, Mt. Prospect C.C.

August 17 — John Deere Tournament at Crystal Lake C.C.

August 20 — Michigan State Univ. Turfgrass Field Day at East Lansing

September 21 — MAGCS meeting at Big Foot C.C.

October 5 - ITF Golf Outing at Olympia Fields C.C.

October 23 — Dinner Dance at River Forest C.C.

November 18 — MAGCS Clinic, Medinah C.C.

November 30-Dec. 1 & 2 - NCTE at Pheasant Run Resort

January 23-30, 1993 — GCSAA Conference & Show, Anaheim, CA

NECROLOGY

It is with a deep sense of loss that we announce the death of a retired member, Walter Hoyt. Walter was the superintendent at Timber Trails C.C. for 38 years and a long time member of the MAGCS.

Editor's Note: I do not have the date of Walter's death, but presume it was in the last month or so. A copy of my notice is below from the family.

July 7, 1992

Dear Sir,

It is with a sadden heart that we inform you of the passing of our father — Walter Hoyt.

Most of his life's work was involved in golf courses. In these last few years he anxiously awaited the latest news in your publication.

Thank you for supplying that enjoyment. God Bless. The Walter Hoyt Family

Congratulations to Bob & Bonnie Rigney on the birth of their son, Aaron Eugene, 9 pounds, 4 ounces born June 15, 1992.

August 10 — Mount Prospect C.C. — Event is a 4 man team total. Gross and net prizes. Net score will be determined by adding the 4 players handicap and taking 80% of the total This number would be substracted from the 4 man total for a team net score.

Event Chairman — Kerry Blatteau Pre-Event co-chairman — Mike Bavier Post-Event co-chairman — John Fulling

......

Look for the price of bluegrass seed to go up this year. There was a very poor crop due to the weather.

Western Open Hospitality Tent

by Dave Blomquist

The following people were responsible for making the MAGCS tent possible: John Gurke, Aurora Country Club; Ken Lapp, Cog Hill Country Club; Kevin DeRoo, Bartlett Hills Golf Course; Rich Wagner, Earthcare Technical Corporation; Marlin McMannis, River Forest Golf Club; Joel White, Oak Park Country Club; Joel Purpur, River Forest Golf Club.

Tracy Murphy from Lemont Paving came through for us by providing their property to MAGCS members for the tent and parking privileges.

Next year we will relocate the tent on the golf course.

The Illinois Landscape Contractors Association will celebrate its 31st Summer Field Day on Wednesday, August 5, 1992, at the beautiful Chicago Botanic Garden in Glencoe, Illinois. With more than 200 booths, this event once again promises to provide information on the latest in plants, equipment, tools, and green industry services as well as an opportunity to make business contacts, arrange sales, observe equipment demonstrations, look up old friends, meet new, enjoy a picnic lunch of grilled chicken, hamburgers and hot dogs with all the trimmings, free popcorn and beverages, play horseshoes in the annual tournament and generally have a pleasant, fun-filled day. Guided tours of the Garden will be conducted throughout the day and will especially showcase the Prairie Demonstration Garden, Production Department and Perennial Evaluation Garden.

Michigan State University Turfgrass Field Day

is being held on Thursday, August 20, 1992 at the Hancock Turfgrass Research Center on the MSU Campus in East Lansing

For more information, contact Dr. Frank Rossi at (517) 353-0860 until July 31. Afterward, Contact Dr. Paul Rieke at (517) 355-0266

"Free Lunch"

August presents the Kneel and Pray era.

Cooler nights to come, may spare Ya!

Thoughts grow into flowers of the imagination,

Going to make more of that Winter Vacation.

Be optimistic, find that Free Lunch,

You've earned it, deserve it, bet a bunch. Soon August will be gone, part of last year,

Here's looking towards Brat's and Beer.

Kenneth R. Zanzig

On the Waterfront

by Jim Reed

Since I turned in my last article in June, I can report good and bad news on the rainfall front. The good news is that many areas of northern Illinois and Indiana received measurable amounts of rain. The bad news is that much of it did not soak into the ground since most amounts came down in 5 to 20 minutes. Also, the accompanying 50 to 80 mph. winds did some major damage to local courses. The first storm of June 17 knocked down 51 large oaks and specimen trees at Lakeshore CC in Glencoe and destroyed probably that many at Skokie CC and Northmoor CC. The second storm on July 2nd knocked down tents at the Western Open at Cog Hill and took down 16 trees at River Forest GC. Meanwhile, every superintendent in the area is finding out how well their course's irrigation system was designed.

This month's topic is "PVC Strength Characteristics and Typical PVC Fitting Failures", from an article written by Ron D. Bliesner in February, 1987. This section of his report states "To better understand the performance of PVC fittings in piping systems, it is helpful to examine the strength characteristics of PVC and the types of fitting failure that can occur. The types of failure fall into four main categories: 1) Burst failure; 2) Long term pressure failure: 3) Cyclic surge failure or fatigue; 4) Mechanical failure due to external forces. Each of these types of failures will be discussed separately, although failure may be caused by a combination of situations.

PVC Strength Characteristics

Most PVC pipe and fittings used in the irrigation industry are manufactured from Type I. Grade I PVC compounds ... The tensile strength of PVC under stress for an extended period of time is often described by a stress regression plot ... for example. if a pipe is continuously stressed at 5,000 psi it would be subject to failing (bursting) after approximately 1,000 hours ... the time required to bring PVC pipe specimens to failure varies according to the pressure (stress) being applied: e.g., individual specimens should withstand 6,000 psi for 10 hours; or 5,000 psi for 1440 hours (60 days); or 4,000 psi for 306,600 hours (35 years) ...

These values are for static pressure conditions. Tests have shown that PVC pipe under continuous static pressure for a long period of time can be subjected to a quick burst pressure (less than 70 seconds in duration), and will perform essentially the same as pipe which has not been subjected to static pressure testing. It appears that, even after years of service, PVC pipe maintains its ability to withstand occasional high pressure surges.

However, if this pipe is subject to frequent pressure variations of a cyclic nature it can fail, even though the peak pressure never exceeds the design pressure of the pipe. ... It appears that the ability of PVC pipe to withstand cyclic pressure conditions is independent of its ability to withstand constant static pressure. PVC pipe seems to have two "funds" upon which to draw, one labeled "static pressure life", and the other "cyclic pressure life".

It should be noted that the above conclusions are based on limited long term testing of PVC pipe ... From examination (cont'd. page 21)



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